# BRUHATH BANGALORE MAHANAGARA PALIKE

## Ward 14, Bagalagunte

NAME OF WORK :- **Ward Development works in Ward no.14 Bagalagunte**

**Estimated Cost** 75.00 Lakhs

| Sl.No. | Description of work | Measurments No.s | L | B | D | Qty | Unit | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Earthwork excavation by manual means in Ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications with all leads and lifts etc., complete as per the direction of Engineer-in-charge of the work..(PWD SR 2016-17, Page No.142, Item No. 19.1) including Conveying the excavated earth silt, debris and over burden earth etc., to lead of 5 kms distance by using private vehicle this includes the cost of loading and unloading charges etc., complete as per the direction of Engineer-in-charge of the work | | | | | | | | |
| | **New CC drain** | 1 | 1 | 200.00 | 1.10 | 0.95 | 209.00 | | |
| | **23rd cross** | 1 | 1 | 65.00 | 1.10 | 0.95 | 67.92 | | |
| | | | | | | **Total qty.** | **276.92** | **cum** | **175.96** | **48727.00** |
| 2 | KSRB 4 -1.3 : Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180 kgs, with 40 mm and down size graded granite metal coarse aggregates @ 0.85 cum and fine aggregates @ 0.57 cum machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation and plinth,including cost of all materials, labour HOM of machinery curing complete as per specifications. Specification No.KBS 4.1, 4.2 ( PWD SR 2016-17, Page No.12, Item No. 4.3) | | | | | | | | |
| | New CC drain | 1 | 1 | 200.00 | 1.10 | 0.15 | 33.00 | | |
| | 23rd cross | 1 | 1 | 65.00 | 1.10 | 0.15 | 10.72 | | |
| | | | | | | | 0.00 | | |
| | | | | | | **Total qty.** | **43.72** | **sqm** | **5159.02** | **225552.00** |
| 3 | Providing and Laying Plain/reinforced cement concrete for side drains using M20 nominal mix Concrete with OPC cement at 300kgs, with 20mm and down size granite metal coarse aggregaes at 0.69cum and fine aggregates at 0.43cum machine mixed, well compacted for walls and bottom including centering, struttting, cost of materials, HOM of Machinery, curing etc., complete excluding cost of steel as per MORTH specifications. for Wall & bottom thickness 15cmDrain Concrete:(Item 37.59 .2 Page 265) | | | | | | | | |
| | **drain bottom** | | | | | | | | |
| | **New CC drain** | 1 | 1 | 200.00 | 0.90 | 0.15 | 27.00 | | |
| | | 1 | 1 | 65.00 | 0.90 | 0.15 | 8.77 | | |
| | **side walls** | 1 | 2 | 200.00 | 0.15 | 0.90 | 54.00 | | |
| | | 1 | 2 | 65.00 | 0.15 | 0.90 | 17.55 | | |
| | | | | | | **Total qty.** | **107.32** | **cum** | **11032.48** | **1184006.00** |
| 4 | KSRRB M2200-6. Supplying, fitting and placing TMT bar Fe 500 reinforcement in sub-structure complete as per drawing and Technical Specifications complete as per specificationsMORTH Specification No.1600 & 2200 [P. no.17 - I. no.28.8.2] | | | | | | | | |
| | drain | | | | | | | | |
| | **10mm dia bars at 150mm C/C** | 17 | 1 | 200.00 | @ | 0.62 | 2108.00 | | |
| | | 17 | 1 | 65.00 | @ | 0.62 | 685.10 | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 10mm dia bars at 125mm C/C | 1600 | 1 | 2.55 | @ | 0.62 | 2529.60 | | | |
| | | 520 | 1 | 2.55 | @ | 0.62 | 822.12 | | | |
| | | | | | | | *6144.82* | kgs | | |
| | | | | | | **Total qty.** | **6.14** | **ton** | **74331.44** | **456395.00** |
| 5 | KSRB 5-14 : Providing and constructing precast concrete solid blocks with compressive strength not les than 35 Kg/sqm with cement mortar 1:4 masonry (quoin, Jamb, closer blocks) with solid concrete blocks of size 40x20x20 cms conforming to I.S: 2185/1965 in superstructure including cost of materials, labour charges, scaffolding, curing complete as per specifications. Page No. 25/ Item No. 5.27/ PWD SR 2016-17 | | | | | | | | | |
| | | 2 | 2 | 40.00 | | 0.40 | 64.00 | | | |
| | | | | | | **Total qty.** | **64.00** | **sqm** | **993.22** | **63566.00** |
| 6 | KSRB 4-1.6: Providing and laying in position plain cement concrete of mix M1:2:4 with cement @240 kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregates @0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 (P.12/I.4.6) PW, P & IWTD - SR 2016-17) | | | | | | | | | |
| | **Coping** | 2 | 2 | 40.00 | 0.15 | 0.07 | 1.68 | | | |
| | | | | | | **Total qty.** | **1.68** | **cum** | **5767.46** | **9689.00** |
| 7 | Supplying and fixing precast reinforced concrete slab 10 cm thick of mix M20 using 20mm and downsize graded granite metal using reinforcement 10mm dia steel at 150mmc/c bothways cost, transportation, hire charges of machinery, machine cutting the vertical face to get plain even surface etc., complete with all leads and lift conveyance charges, labour charges inclusive of cost of all materials - Data rate approved by Chief Engineer, Dasarahalli zone | | | | | | | | | |
| | **New CC drain** | 1 | 1 | 200.00 | 0.90 | | 180.00 | | | |
| | **0** | 1 | 1 | 65.00 | 0.90 | | 58.50 | | | |
| | **Coping** | 1 | 2 | 40.00 | 0.90 | | 72.00 | | | |
| | | | | | | **Total qty.** | **310.50** | **sqm** | **1680.00** | **521640.00** |
| 8 | KSRRB M600-1: Construction of dry lean cement Concrete mix CC1:5:10 with OPC cement @160kgs, with 25mm and down size graded grnite metal coarse aggragate at 0.86cum and fine aggregates @ 0.58cum sub-base over a prepared sub-grade with (Coarse and fine aggregate conforming to IS:383) aggregate cement ratio not to exceed 15:1 Aggregat gradiation after blending to be asper Table 600-1, cement content not to be less than 160kg/cum, optimum moisture content to be determined during trail length construction, concrete strength not to less than 10Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete s per specifications( It 22.1 & Page No.176) | | | | | | | | | |
| | | 1 | 1 | 55.00 | 1.00 | 0.15 | 8.25 | | | |
| | **cross roads near 22nd cross** | 1 | 1 | 85.00 | 1.00 | 0.15 | 12.75 | | | |
| | | | | | | **Total qty.** | **21.00** | **cum** | **3986.66** | **83720.00** |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 ReaffirmecF2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.43cum) ((P.No.177, I.No.22.6.1 of PW,P&IWTD SR 2016-17) | | | | | | | | | |
| | | 1 | 1 | 55.00 | 1.00 | 0.15 | 8.25 | | | |
| | **cross roads near 22nd cross** | 1 | 1 | 85.00 | 4.50 | 0.15 | 57.37 | | | |
| | | | | | | **Total qty.** | **65.62** | **cum** | **6217.96** | **408023.00** |
| **10** | Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery,screed vibratory,power Floater,blade and disc etc., with all lead and lift PWD SR 2016-17[P.No.177 - I.No.22.7] | | | | | | | | | |
| | Rate=Basic rate + 6% of B.R(area weightage) =90.00+5.40=95.40/sqm | | | | | | | | | |
| | **cross roads near 22nd** | 1 | 1 | 85.00 | 4.50 | | 382.50 | | | |
| | | | | | | | 0.00 | | | |
| | | | | | | **Total qty.** | **382.50** | **sqm** | **95.40** | **36491.00** |
| **11** | Providing groove cutting to concrete pavement for width of 5mm to 10mm and depth 80mm - 100mm including cost of cutting machine, generator & HOM of machinery, including cost of blade, coolant, etc., including cleaning of grove & providing sand and hot bitumen fillars, and filler metal etc., including cost of conveyance of all amterials, labour, lead and lift charges and all other incidental charges as per drawing and as per specifications.(P.No.178, I.No.22.8.1 of PW, P&IWTD SR 2016-17) | | | | | | | | | |
| | **cross roads near 22nd** | 1 | 14 | 4.50 | | | 63.00 | | | |
| | | | | | | | 0.00 | | | |
| | | | | | | **Total qty.** | **63.00** | **Rmt** | **121.90** | **7680.00** |
| **12** | KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWTD S.R 2016-17) | | | | | | | | | |
| | **2nd main. Brundavana Layout** | 1 | 1 | 55.00 | 1.00 | 0.50 | 27.50 | | | |
| | **cross roads near 22nd cross** | 1 | 1 | 210.00 | 1.00 | 0.50 | 105.00 | | | |
| | **cross roads near 9th main: Bhuvaneshwarinagara** | 1 | 1 | 400.00 | 1.40 | 0.30 | 168.00 | | | |
| | | | | | | | 0.00 | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Total qty. | 300.50 | sqm | 137.8 | 41409.00 |
| 13 | Scarifying bituminous course 50mm to 75 mm thick along with premix carpet/surface dressing by road roller attached with scarifier without disturbing the base & stacking the debris including cost of all labour charges complete as per specifications (PWD SR of 2015-16, P- 143, It.No.19.56) | | | | | | | | |
| | | 1 | 1 | 225.00 | 7.60 | | 1710.00 | | |
| | 9th main cross roads | 1 | 2 | 60.00 | 6.00 | | 720.00 | | |
| | | | | | | | 0.00 | | |
| | | | | | Total qty. | 2430.00 | sqm | 30.74 | 74698.00 |
| 14 | KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications.Page No 149/ Item No. 19.64 PWD SR 2016-17 | | | | | | | | |
| | nagara | 1 | 1 | 225.00 | 7.60 | | 1710.00 | | |
| | 2nd main. Brundavana Layout | 1 | 1 | 55.00 | 1.00 | | 55.00 | | |
| | cross roads near 22nd cross | 1 | 1 | 210.00 | 1.00 | | 210.00 | | |
| | cross roads near 9th main: Bhuvaneshwarinagara | 1 | 1 | 400.00 | 1.40 | | 560.00 | | |
| | 9th main cross roads | 1 | 2 | 60.00 | 6.00 | | 720.00 | | |
| | | | | | Total qty. | 3255.00 | sqm | 5.30 | 17252.00 |
| 15 | KSRRB M400-1 For Grading I material construction of granular sub-base by providing coarse graded crushed stone aggregates of Granite/ trap/basalt material spreading in uniform layers with motir grader on prepared surface mixing by a mix in place method with rotawater at OMC, and Compacting with vibratory roller to achieve the desired density, complete as per specifications.by mix in a Place method for course Graded Granular Sub Base Material as per 400-2 for grading I material . Page No 155/ Item No. 20.6.1 PWD SR 2016-17 | | | | | | | | |
| | nagara | 1 | 1 | 225.00 | 7.60 | 0.15 | 256.50 | | |
| | cross roads near 9th main: Bhuvaneshwarinagara | 1 | 1 | 400.00 | 1.40 | 0.15 | 84.00 | | |
| | 9th main cross roads | 1 | 2 | 60.00 | 6.00 | 0.15 | 108.00 | | |
| | | | | | Total qty. | 448.50 | cum | 1518.98 | 681263.00 |
| 16 | Providing, laying, spreading and compacting stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Complete as per specifications. MORTH Specification No.406 [P.No.158- It.No20.18] | | | | | | | | |
| | nagar | 1 | 1 | 225.00 | 7.60 | 0.15 | 256.50 | | |
| | Layout | 1 | 1 | 55.00 | 1.00 | 0.20 | 11.00 | | |
| | cross roads near 22nd cross | 1 | 1 | 210.00 | 1.00 | 0.20 | 42.00 | | |
| | cross roads near 9th main: Bhuvaneshwarinagara | 1 | 1 | 400.00 | 1.40 | 0.15 | 84.00 | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 9th main cross roads | 1 | 2 | 60.00 | 6.00 | 0.15 | 108.00 | | | |
| | | | | | | Total qty. | 501.50 | sqm | 1768.08 | 886692.00 |
| 17 | Providing and applying primer coat with S.S bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of .60kg /sqm using mechanial means complete as per Specifications. (Pg.no.160, It.no.21.6) | | | | | | | | | |
| | nagar | 1 | 1 | 225.00 | 7.60 | | 1710.00 | | | |
| | cross roads near 9th main: Bhuvaneshwarinagara | 1 | 1 | 400.00 | 1.40 | | 560.00 | | | |
| | 9th main cross roads | 1 | 2 | 60.00 | 6.00 | | 720.00 | | | |
| | | | | | | Total qty. | 2990.00 | sqm | 29.68 | 88743.00 |
| 18 | KSRRB 500-7. Providing and applying tack coat on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface ) including cost of all materials, labour, HOM of machineries complete as per specifications.(Pg No.160 It. No.21.7) | | | | | | | | | |
| | | 1 | 2 | 225.00 | 7.60 | | 3420.00 | | | |
| | cross roads near 9th | 1 | 1 | 400.00 | 1.40 | | 560.00 | | | |
| | cross roads near 9th | 1 | 1 | 400.00 | 5.00 | | 2000.00 | | | |
| | 9th main cross roads | 2 | 2 | 60.00 | 6.00 | | 1440.00 | | | |
| | | | | | | Total qty. | 7420.00 | sqm | 12.72 | 94382.00 |
| 19 | Providing and laying bituminous macadam on prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant 40 tonne capacity, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve the desired density, 50/75mm compacted thickness with 3.3% bitumen but excluding the cost of primer/tack coat with lead incl. cost of all materials, labour, HOM of machineries complete as per specifications with 80/100 grade bitumen using 40/60TPH capacity H.M.P with Mechanical paver Gr II (50/75mm) with 3.3% VG-30 Bitumen as per the directions of Engineer-in-charge of the work ( PWDSR 2016-17, P.No.162, I No.21.11.6) | | | | | | | | | |
| | nagara | 1 | 1 | 225.00 | 7.60 | 0.05 | 85.50 | | | |
| | cross roads near 9th | 1 | 1 | 400.00 | 1.40 | 0.05 | 28.00 | | | |
| | 9th main cross roads | 1 | 2 | 60.00 | 6.00 | 0.05 | 36.00 | | | |
| | | | | | | Total qty. | 149.50 | cum | 5669.94 | 847656.00 |
| 20 | KSRRB M500-19. Providing and laying bituminous concrete with hot mix plant using crushed aggregates of specified grading, pre mixed with bituminous binder and filler, transporting the hot mix to work site laying with paver finisher to the required grade, level and alignment . Rolling with smooth wheeled Vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause no 500.9 complete in all respects complete as per specifications. MORTH specification No509, using 40/60 TPH capacity H.M.P.with Mechanical paver Gr -II (30mm to 45mm) with 5.4% VG-30 Bitumen (P-165, It, 21.22.6.) | | | | | | | | | |
| | nagara | 1 | 1 | 225.00 | 7.60 | 0.03 | 51.30 | | | |
| | | 1 | 1 | 400.00 | 5.00 | 0.03 | 60.00 | | | |
| | 9th main cross roads | 1 | 2 | 60.00 | 6.00 | 0.03 | 21.60 | | | |
| | | | | | | Total qty. | 132.90 | cum | 8013.60 | 1065007.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. PWD SR 2016-17 [P.No.185-I.No.24.15] | | | | | | | | |
| | | 1 | 2 | 235.00 | 0.15 | | 70.50 | | |
| | | | | | | Total qty. | 70.50 | sqm | 542.72 | 38262.00 |
| | | | | | | | | | Sub Total | 6879225.00 6879589.00 |
| | | | | | | | | | Qc Charges 1%+KRIDL 8% | 619130. 619163.00 |
| | | | | | | | | | Miscellneous & rounding off | 1645.00 1248.00 |
| | | | | | | | | | Total | 7500000.00 |
| | (Rupees Seventy five Lakhs Only) | | | | | | | | | |

**CERTIFICATE**

1. *Certified that The work spot has been inspected by me and the work is necessary & site condition*
2. *Certified that the work is not split up*
3. *Certified that the estimate is based on PW,P&IWTD Bangalore Circle SR of 2016-17*
4. *Certified that Adequate & necessary provisions have made in the estimate.*
5. *Certified that the above area comes under BBMP limit*
6. *This Work is not included in any other work taken up*

**Asst Engineer**
**Ward-14**

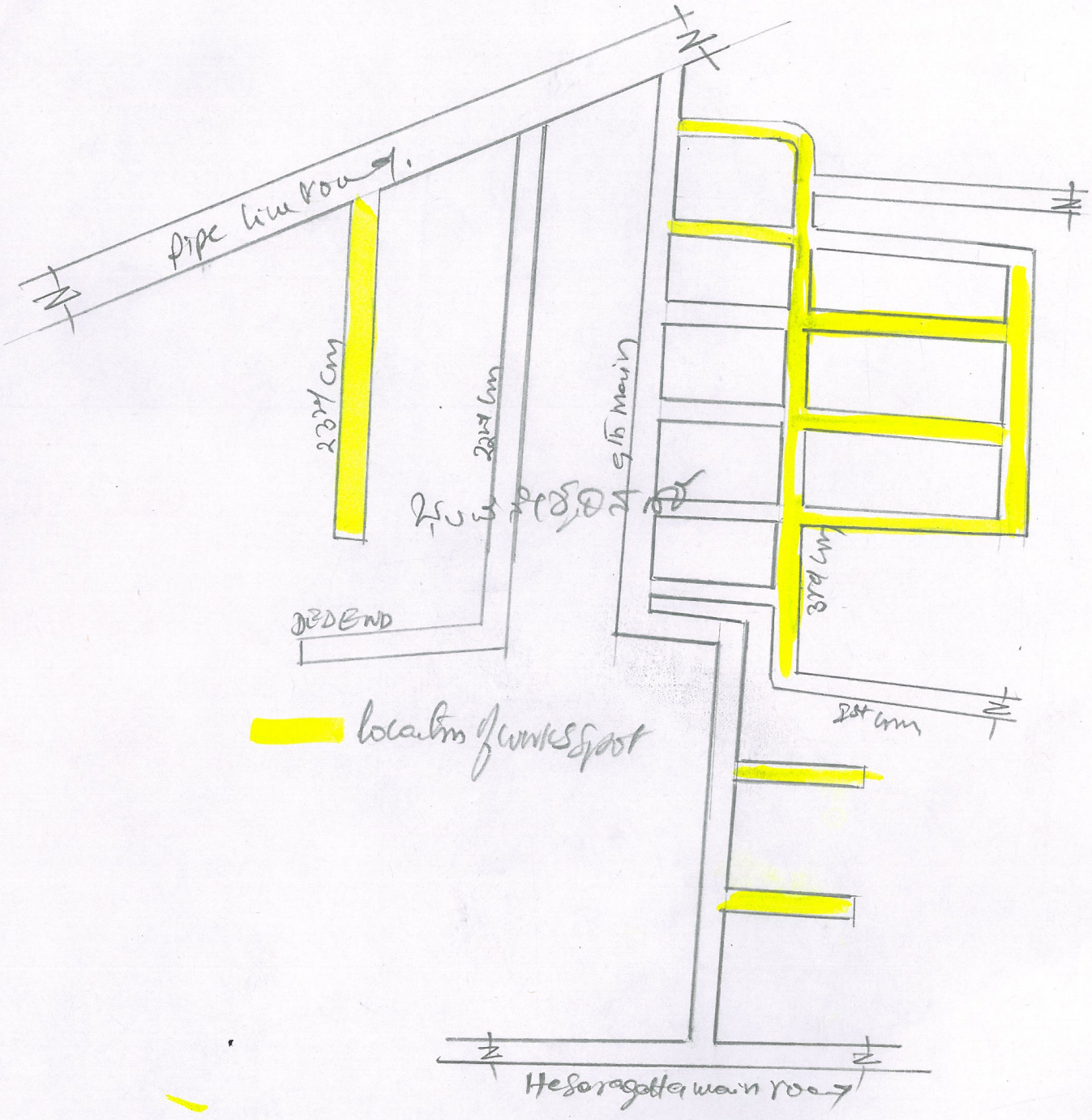
**Assistant Executive Engineer**
**Dasarahalli Sub Division**
**B.B.M.P**

**Excecutive Engineer**
**Dasarahalli Division**
**B.B.M.P**

ನಂ.CE/TS/48/17-18 ದಿನಾಂಕ : 11/05/2017.
ರೂ. Rs. SEVENTY FIVE Lakhs
Only/- ಮಾತ್ರ ಮಿಲಿಯನ್ ಲಕ್ಷಗಳು ಮಾತ್ರ/-
ಅಂದಾಜು ಪಟ್ಟಿಗೆ ತಾಂತ್ರಿಕ ಮಂಜೂರಾತಿ
ತಾಂತ್ರಿಕ ಸಹಾಯಕರು
ದಾಸರಹಳ್ಳಿ ವಲಯ

ನಂ.EE/DD/AS/01/17-18 ದಿನಾಂಕ : 9.5.2017
ರೂ. Seventy Five lakhs Only
ಅಂದಾಜು ಪಟ್ಟಿಗೆ ಆಡಳಿತಾತ್ಮಕ ಮಂಜೂರಾತಿ ನೀಡಿದೆ
ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ.ದಾಸರಹಳ್ಳಿ ವಿಭಾಗ
ದಾಸರಹಳ್ಳಿ ವಲಯ, ಬೆಂಗಳೂರು.

Nature of work :- Water development work as per NO 14.




W 14

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರ
ಜಿ.ದಾಸರಹಳ್ಳಿ
ಬೆಂಗಳೂರು